stood the nature of their work. The best Thames sand was used, and the men had no inducement to hurry the work. The question as to who would sustain the loss had not been mooted. He was not prepared to answer that question, but would like to leave it to the coroner to decide, after the inquiry was over.

Robert Butterwick, the general foreman of the works, was examined, and deposed that no undue haste had been used. The foundations of the work were commenced in August, and the pedestals were begun on the 21st of October: the columns were begun on the 11th of November, and finished on the 22nd. On the 11th of December the arches were commenced; and the work went straight up from that time to the 6th of January, when the accident happened. The bricklayers were putting on the two last courses of bricks to receive the stone cornice when the accident occurred. Between the building of the entablature and the walls, from the 11th of December to the 6th of January, the columns were occasionally left, in order to carry up all the other works with the same scaffolding. None of the men complained that the work was carried on in too great a hurry, or that the materials were of an inferior description. Witness said he could not satisfactorily account for the accident; but, being pressed by the coroner, said he was disposed to think the pedestals must have failed in consequence of the wet weather, which did not admit of the mortar getting hard.

Mr. Hosking questioned this and other witnesses very closely as to the scaffolding; and it appeared that the ledgers went across the building, and were secured into the side walls, and that the scaffolding had no bearing on the work that fell, excepting the putlogs, in the usual way. Below, short scaffold poles were used as thorough putlogs, and were tied to the ledgers alongside each column, both inside and outside (touching the columns), so as to stiffen them. There were braces to prevent vibration: there was no weight on the scaffold at the time of the fall.

Butterwick was questioned as to the construction of the columns, and said he had seen columns built mostly with the bricks laid flat, but it was thought that the work would be sounder by laying the bricks on the edge, and that the columns would hold more bricks and less cement.

For our own part, we are bound to say, that columns of the diameter and height here used, constructed with either bricks flat or bricks on edge, should not be hastily depended on. The bricks are necessarily so much cut about, as to afford little solid bed, and less bond. Every thing, in such a case, depends on the cement; and if this be bad, or not allowed to indurate sufficiently, a trifling force is sufficient to produce an accident. Calculations of what such columns will bear, without knowing exactly their internal condition, is idle.

James Stephenson, the foreman of bricklayers, stated that there was no haste, no complaint. The scaffolding was put up in the usual manner, and there was no pressure upon it. He attributed the accident to the failure of one of the pedestals, which, being built with mortar and soft (though well bonded with whole bricks and flushed up), might have yielded, and thrown the weight on one column.

James Harris, a bricklayer, deposed that Gedge, one of the sufferers, had complained to him respecting the alteration in laying the bricks on their edge instead of flat, and asked him what he thought of it. Witness told him he did not know; he had seen the plan adopted in short columns, but not where there was any heavy weight. He said he considered it was rather a "comical job." Gedge, in the Christmas week, made a remark, saying that he should go to the works once too often; and he added, that he thought the columns were not strong enough to support the work above. Witness did not communicate this to any person, though he had great confidence in Gedge's opinion.

It is somewhat extraordinary that the only man on the work, so far as can be learnt, who had the slightest doubt as to its stability, should have been the sufferer. Similar instances, however, are not rare.

Mr. Christopher Bavin, the architect's clerk of the works, said the work had been executed in the best manner, and that he had never had occasion to find fault. It was he who suggested that the column should be built with the bricks on edge, because it occurred to him that the material would be more compact. The bricks were damaged by the workmen in laying them flat. There would also be less cement required. The men approved of it. He did not think that the inequality of the pressure, resulting from the upper wall being over one column only, was in any degree dangerous; he estimated that the back columns took one-third the weight, and the front columns two-thirds. He was disposed to attribute the accident to the vibration produced by the scaffolding, but could not say how, nor did he know of any defect in the scaffold.

Mr. Tite, architect, was examined on the part of Mr. Hardwick, and said he had looked at the drawings with great care; had heard all the evidence, and had formed an opinion as to the cause of the accident. He thought, from the brickwork having been carried up in wet weather, somewhat rapidly (in better weather he would not have hesitated to do it in half the time), that the brickwork in mortar was insufficiently set. The brickwork in cement would of course be better, and he did not think that the columns broke. He believed that the pedestals gave way first. "The evidence on the face of the pedestal," said Mr. Tite, "induces me to think so. It is cut off angle-ways, as if the column had slipt off it. I think the cause was this—the masons were raising the scaffolding to an extreme height above the wall. There were four men on the highest point,* and I think that the sway which their weight gave to so long a lever as 90 feet, had a tendency to pull over the upper wall, and throw an excess of weight on to the inner column, besides altering its position, which threw a pressure on the pedestal that the unsettled work would not bear. Men on a scaffold are not conscious of the danger of their proceedings. I have been on a scaffold, and when I have myself been alarmed none of the men have evinced any apprehension. By the slipping of the column, the York landings, which were above them, would naturally fall on the northern side of the wall, or outward (?), where they were actually found. In Tredgold's "Treatise on Cylinders," which I now hand up, will be found a plate illustrating the effect of altering the line of pressure in columns. In the architecture I see nothing which could have led to the accident; taking the best English and French authorities for the basis of my calculation, I have no doubt that the columns would have carried eight times the weight which was put upon them."

* It was afterwards shewn that there was only one man on the scaffolding; three had come down.

In reply to a question by the coroner, Mr. Tite continued—I should not blame any body for this accident. I think it is without blame. I rather refer the accident to the bad system of scaffolding adopted in England. In France they use framed timbers for scaffolding; we use a different kind for brickwork, but the framed scaffold for stonework. Ours unquestionably is much easier, and, as proof that accidents are not frequent (because of the skilfulness of the men), I may say that I have been twenty-five years in practice, and have never had an accident from a scaffold. With regard to the mode of laying bricks flat, or on the edge, in the building of columns, I always hesitate to interfere with the habits of English workmen, but I think that the change of placing the brick on the edge is advantageous, and I certainly should direct it to be adopted in future. I have no doubt that column for column it would carry more than if the bricks were laid flat. My own conviction is, that if this had been March instead of November you would never have had any inquiry of this nature.

Mr. Edward Blore, architect, said that he had carefully examined the drawings and considered the matter, and entirely concurred in the statement made by Mr. Tite. In reply to the Coroner, who asked, what steps he would take to prevent the repetition of a similar accident, Mr. Blore said, he would connect the wall during its progress with a second wall, which there is behind it at about ten feet distance, so as to steady it; but he was not certain that he should have thought it necessary to do this in the first instance.

No further evidence being offered, Mr. Wakley said that Mr. Hosking desired to give the matter careful consideration, and to offer his opinion in writing; he would, therefore, with the concurrence of the jury, adjourn the inquiry till Thursday morning, ten o'clock.

On Thursday, Mr. Wakley being too unwell to attend, Mr. Mills, the deputy-coroner, took the chair, when Mr. Tite asked permission to say, in confirmation of his opinion previously offered, that experiments had been tried on two piers, one built with bricks, flat, in cement, and the other with bricks on edge, in cement,—and that while the former was crushed by 30 tons, the latter required 35 tons. The less bricks were cut, the better they were, since they are harder outside than in. Moreover, bricks are burnt on edge. In proof of the strength of bricks, he referred to a chimney at Warrington 440 ft. high.

Mr. Mills stated that Mr. Hosking had handed to him his opinion, and in so doing had remarked that he differed in some of the minor points from those who had preceded him, and desiring to avoid the appearance of arrogance in setting up an opposite opinion in matters of no consequence, he had confined himself to a general opinion as to the fall. He would, however, willingly answer any questions. He then read the following:—

"I am of opinion that the columns, or some of them, failed under an impulse derived from the scaffold acted upon by the movements of the workmen; and the failure of any one would, under the circumstances, necessarily involve that of all the rest, and of the superstructure: the weakness which admitted of failure from such an impulse being entirely attributable to the unindurated state of the cement used in building the columns,—and that the columns broke under an impulse which I believe they might have borne safely if the cement had

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